least some of the problems created by him and first of all ecological problems.

The development of the natural environment and human society are interrelated and irreversible. That is why the destruction of the Earth landscapes and their natural environment in general is sure to cause the degradation of humanity as part of the biosphere. It is impossible to change the routes of development of human civilization.

Thus the appearance and the intensification of the global problems is caused by the ignorance, low level of culture. These problems are various. To the most important aims, the solving of which determine the conservation of civilization belongs the turn from the criminal to the reasonable use of nature. It is necessary to stop pollution of the environment, to decrease the intensity of the use of the traditional energy and all kinds of resources, stop the impetuous growth of the earth population. The natural environment quickly loses its natural qualities under the pressure of man-caused changes. That is why modern civilisation is bound to die if man won't sohe the ecological problems in the nearest future. [1J

Thus man without taking into consideration the natural laws of the development of biosphere has turned it into such a state, which according to the words great Russian scientist V.I.Vernadskiy is in no way close to the notion of "noosphere". i.e. the sphere of the living and the sensible. .

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LANDSCAPE MONITORING OF THE NATURAL ENVIRONMENT OF BIOTA

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Nature has developed complex bounds uniting living organisms with their natural environment into one entity. The landscape biota includes the whole of all the living organisms that most keenly react upon the changes in their habitat, especially its pollution. It is necessary to carry out monitorings of the state, evolution, dynamics and degradation of the separate natural components or processes as well as ecological monitorings of all the habitats. But they are always local, fleeting, and that is why ineffective, and the most essential is, that they don't permit to make long-term regional and moreover global prognoses. Monitorings usually make use of a great amount of data. However, the united data fund of the pollution of the habitats of biota as well as of territorial and water landscapes on the whole is essential. All the monitorings, which determine the maximum permissible ^concentrations of the substances dangerous for biota and man w[r]on't save the existing ecological situation.- It is no doubt necessary to take into account the established norms of the maximum permissible concentrations or maximum permissible levels. However, all lands of pollution do not produce separate, but united influence upon the landscapes, thus creating critical conditions for the life of biota, causing rapid reduction of species diversity of living organisms and landscape degradation.

AH monitoring programmes with the aim to control the state of the separate natural components must have a landscape base. This will allow the most secure and objective estimation of the ecological and biological qualities of the habitat of all living organisms including man.

Landscape monitoring is based upon the system analysis of the structure of the habitat of living organisms. Such habitat is constructed by the geosystems of all levels of organisation, which are remarkable for their integrity and dynamics, possess migratory and accumulative characteristics of natural and man-caused substances. The interrelation of the five main natural components (Hthosphere, water, air, flora and fauna) is the basis of the balanced state of natural complexes.

They hardly submit to the anthropogenic influence including the man-caused one. Especially resistant is geoma of the landscapes, i.e. geological and geomorphologic conditions of the life of biota, which is temporally and spatially dynamic. The stabilizing role of landscape geoma has a determinant impact upon the bioproductive, water and migratory conditions of chemical elements in geosystems. It determines the stability potential. The first and foremost aim is the choice of standard individual monitoring geosystems in every type of landscape. These standard monitoring regions must be first of all geosystems of the protected natural territories. The main aim of the creation of the reserved, territories must become their preservation for the purpose of comparison with familiar degrading geosystems. They must be created in all natural zones of the world and on all genetic species of the geologic measures with all the year round complex observations and must not be restricted to the studies of ecosystems, flora and fauna only. Then we could foresee many undesired consequences of the man-caused influences.

These unique natural objects as well as natural resources created by Nature for us must be under rigid control of the State and must not be transferred to private any propriety or rented. They must be a base for models of restoration of the spoiled and degraded individual landscapes of the same type. Landscape mapping of these geosystems with the use of aerial and space survey will let us determine the degree of danger of the man-caused pollution for biota and the migration conditions of the man-caused substances.

Landscape monitoring provides a possibility to follow the temporal changes of loadings upon biota,

to set regions of carrying out observations of the pollution sources, to determine the sanitary quality norms of all the habitats and to define the maximum permissible norms of anthropogenic pressure on landscapes.

It is only on the basis of landscape monitoring, that it is possible to create the regions of the background monitoring, which must be situated in all types of landscapes of the Earth and occupy individual landscapes on different genetic types of surface measures on account of rock substances which are involved in the processes of vertical and space migration of chemical elements and man-caused substances. Landscape monitoring must base on the comparison of data of the space information of different flight time about the dynamics of natural processes of pollution of natural components and anthropogenic changes of the landscape biota.

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